## **TOYOTA**

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## VIA ELECTRONIC DELIVERY

September 20, 2017

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12<sup>th</sup> Street SW
Room TWA325
Washington, DC 20554
Re: Ex Parte Notice

ET Docket No. 13-49, Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band

Dear Ms. Dortch:

This is to inform you that on Monday, September 18, 2017, Hilary Cain, John Kenney, and Vincent Legagneur of Toyota (collectively "Toyota Representatives") met separately with Rachael Bender, Legal Advisor to Chairman Ajit Pai and Kevin Holmes, Legal Advisor to Commission Brendan Carr. The Toyota Representatives reiterated the company's support for Dedicated Short-Range Communication (DSRC) and the importance of protecting DSRC from harmful interference from unlicensed devices.

The Toyota Representatives noted the significant progress that had been made with respect to DSRC development and deployment since the Commission first initiated the 5 GHz proceeding in February of 2013. The National Highway Traffic Safety Administration's large-scale pilot deployment with approximately 3000 DSRC-equipped vehicles was completed in 2013. The National Highway Traffic Safety Administration reviewed the results of the pilot and concluded in 2014 that the data supported a decision to move forward with a DSRC mandate. In 2015, deployment-ready standards for DSRC were finalized by the stakeholder community and Toyota began deploying vehicle-to-vehicle communication technology using DSRC in Japan. In 2016, the federal government expanded its support for DSRC deployment by sponsoring connected vehicle efforts involving thousands of DSRC devices in Tampa, New York City, and Wyoming. And, in 2017, the first DSRC-enabled production vehicles hit the U.S. market.

The Toyota Representatives noted the recent announcement by Volkswagen as further evidence that DSRC deployment is well underway. The market leaders in Japan (Toyota), Europe (Volkswagen), and the United States (General Motors) have now either begun deployment of DSRC technology or announced a specific deployment plan for the technology.

The Toyota Representatives further expressed hope that the Notice of Inquiry exploring the potential for 1200 MHz of additional mid-band spectrum available for unlicensed use (5925 -7125 MHz) would relieve some pressure on and demand for the 45 MHz of spectrum under consideration in the 5 GHz band.

The Toyota Representatives also explained that in a European (CEPT CPG PT-D) spectrum regulation meeting last week, regulators from countries throughout Europe concluded – based on a technical report that was prepared at their request by a number of DSRC and Wi-Fi stakeholders<sup>1</sup> - that it was not possible to adequately protect ITS (DSRC) communications from harmful interference using sharing mechanisms currently under consideration. In fact, QUALCOMM, which has previously advocated for sharing, submitted a contribution explicitly concluding that "spectrum sharing for RLAN [Radio LAN] and ITS considering safety-related applications in the 5.9 GHz band should not be recommended."

The Toyota Representatives expressed strong support for the testing that is currently underway at the Commission. The Toyota Representatives reiterated support for current testing plans that include an examination of cross-channel interference and co-channel interference. Toyota Representatives further reiterated the industry's long-standing view that testing should also examine the degradation to DSRC performance that would result from the changes required of DSRC operation under the re-channelization proposal.<sup>3</sup>

Finally, the Toyota Representatives expressed support for the three-phase test plan that the Commission laid out in the Commission's update to the 5 GHz proceeding from June 1, 2016. In that Public Notice, the Commission stated that it anticipated that all three phases of the test plan would be completed before the Commission reached any conclusions as to how unlicensed devices can safely operate in the 5.9 GHz band. The Toyota Representatives stated the continued need for the empirical data that will be generated in all three phases of the testing, particularly with respect to field testing in real-world environments, to analyze and quantify the interference potential introduced to DSRC from unlicensed use in the 5.9 GHz band.

/s/Hilary M. Cain Hilary M. Cain TOYOTA

Director, Technology and Innovation Policy 325 7<sup>th</sup> Street NW, Suite 1000 Washington, DC 20004

<sup>&</sup>lt;sup>1</sup> ETSI TR 103 319 (August 2017)

<sup>&</sup>lt;sup>2</sup> CEPT ECC CPG PTD DOC (17)108, Vilnius Lithuania (Sept. 5, 2017)

<sup>&</sup>lt;sup>3</sup> Letter from Ellen J. Gleberman, Executive Vice President and General Counsel, Association of Global Automakers and Jessica L. Simmons, Assistant General Counsel, Alliance of Automobile Manufacturers, to Marlene Dortch, Secretary, Federal Communications Commission (November 17, 2016)